

Public Notice  
Proposed Issuance of a  
Construction Permit/PSD Approval to  
ADM Corn Processing Plant in Decatur

ADM Corn Processing Plant (ADM) has applied for a construction permit from the Illinois Environmental Protection Agency (Illinois EPA) to install a new slow-rate anaerobic wastewater treatment system at ADM's East Plant located at 4666 Faries Parkway in Decatur. The project needs a construction permit from the Illinois EPA Bureau of Air because it will be a source of air emissions. The new system will produce biogas, which is planned to be used as a replacement for natural gas in the processes at the East Plant. The permit also allows the replacement of burners or burner components on seven fiber feed dryers with burners of equal capacity that will be able to burn the biogas. The proposed system qualifies as a major modification under the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, for nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO) and sulfur dioxide (SO<sub>2</sub>).

Based on its review of ADM's application, the Illinois EPA has made a preliminary determination that this project is entitled to a construction permit. **The Illinois EPA is accepting comments prior to making a final decision on the application for this project. Comments must be postmarked by midnight February 19, 2006.** If sufficient interest is expressed in this matter, a hearing may be held. Comments, questions and requests for information, should be directed to Brad Frost, Bureau of Air, Illinois EPA, P. O. Box 19506, Springfield, IL 62794-9506, phone 217/782-2113, TDD 217/782-9143.

Persons wanting more information may view the draft permit and project summary at [www.epa.gov/region5/air/permits/ilonline.htm](http://www.epa.gov/region5/air/permits/ilonline.htm) (please look under All Permit Records, PSD, New). These documents and the application may also be viewed at the Illinois EPA's offices at 2125 South First Street in Champaign, 217/278-5800 and 1340 N. Ninth St., Springfield, 217/782-7027 (please call ahead to assure that someone will be available to assist you). Copies of the documents will be made available upon request.

The new wastewater treatment system would reduce the contaminant loading of the facility's wastewater prior to further treatment in the existing aerobic treatment system. The system will consist of four new lagoons covered with a floating membrane to capture biogas. The biogas, which is mostly methane, is formed by the anaerobic activity in the lagoons. Emissions from the new treatment system will be controlled by a multi-stage Lo-Cat<sup>®</sup> control system, which uses absorption and oxidation to remove hydrogen sulfide (H<sub>2</sub>S) from the biogas. In the event that process equipment cannot accept the biogas, it will be routed to a flare.

Under the PSD rules, ADM must use Best Available Control Technology (BACT) for control of SO<sub>2</sub>, NO<sub>x</sub> and CO emissions from the new treatment system. SO<sub>2</sub> emissions will be controlled by the Lo-Cat<sup>®</sup> system. NO<sub>x</sub> and CO emissions will be controlled by

proper operation of the flare. Illinois EPA's initial review indicates this will constitute BACT for the new treatment system.

The air quality impact analysis prepared pursuant to the PSD rules for this project indicates that it will not cause a violation of the air quality standards or PSD increments for NO<sub>x</sub>, CO or SO<sub>2</sub>. For NO<sub>x</sub>, the project's peak impacts are at most 0.04 micrograms per cubic meter (µg/m<sup>3</sup>) annually compared to the standard of 100 µg/m<sup>3</sup>. For CO, the project's peak impacts are at most 4.10 µg/m<sup>3</sup> for the 8-hour average and 10.83 µg/m<sup>3</sup> 1-hour average compared to standards of 10,000 µg/m<sup>3</sup> 8-hour average and 40,000 µg/m<sup>3</sup> 1-hour average. For SO<sub>2</sub>, the project's peak impacts are at most 0.03 µg/m<sup>3</sup> annual average, 0.37 µg/m<sup>3</sup> 24-hour average, and 1.07 µg/m<sup>3</sup> 3-hour average compared to standards of 80 µg/m<sup>3</sup> annual average, 365 µg/m<sup>3</sup> 8-hour average, and 1,300 3-hour average.